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TABLE 1

Paint with newtonian resin only	
Ingredients	parts
Newtonian resin	4.20
Eastman TXIB	0.9
Bentone SD1	1.02
Tioxide TR92	9.18
Melamine	9.18
Dipentaerythritol	15.61
Exolit AP422	31.33
Solvesso 100	28.57

Paint with newtonian & crosslinked resin	
Ingredients	parts
Newtonian resin	3.36
Crosslinked resin	0.84
Eastman TXIB	0.9
Bentone SD1	1.02
Tioxide TR92	9.18
Melamine	9.18
Dipentaerythritol	15.61
Exolit AP422	31.33
Solvesso 100	28.57

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TABLE 2

Paint 1 Ingredients	parts
Newtonian PMS/2EHA resin	6.5
Crosslinked PMS/2EHA resin	2.5
Cereclor S52	3.0
Cereclor 70	6.5
Tioxide TR92	6.0
Dipentaerythritol	8.0
Melamine	8.5
Exolit AP422	26
white spirit 17	23
Solvesso 100	10

Paint 2 Ingredients	parts
Newtonian PMS/2EHA/PTBS resin	6.36
Crosslinked PMS/2EHA/PTBS resin	0.71
Cereclor S52	2.78
Cereclor 70	4.29
Tioxide TR92	8.08
Dipentaerythritol	12.12
Melamine	13.13
Exolit AP422	22.22
white spirit 17	30.3
Solvesso 100	

Paint 3 Ingredients	parts
Newtonian Styrene/acrylic resin	8.4
Crosslinked styrene /acrylic resin	2.1
Cereclor 70	8.5
Tioxide TR92	9.5
Dipentaerythritol	7.9
Melamine	7.9
Exolit AP422	26.4
white spirit 17	26.3
Solvesso 100	3.0

comparative Paint 4 Ingredients	parts
Comparative newtonian Styrene/acrylic resin	9.0
Cereclor 54DP	5.76
Cereclor S52	3.0
Cereclor 70	1.6
Tioxide TR92	6.0
Dipentaerythritol	8.0
Melamine	8.5
Exolit AP422	26.0
white spirit 17	19.6
Solvesso 100	10.0
Bentonite	1.0

Figure 1

Thermal degradation curve of Newtonian PMS/2EHA resin, APP and of the 60/40 w mixtures of the two.

**TGA curves of Ammonium polyphosphate (APP)
and PMS/2EHA (75/25) linear resin**

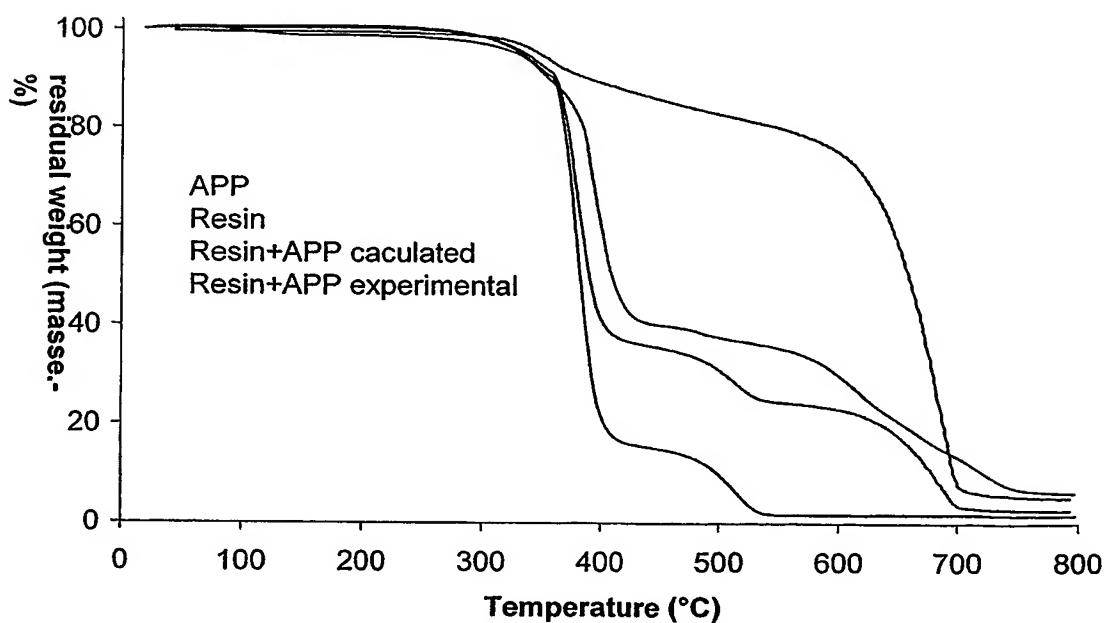


Figure 2

Thermal degradation curve of Newtonian styrene/acrylic resin, APP and of the 60/40 w mixtures of the two.

**TGA curves of Ammonium polyphosphate (APP)
and styrene/acrylic linear resin**

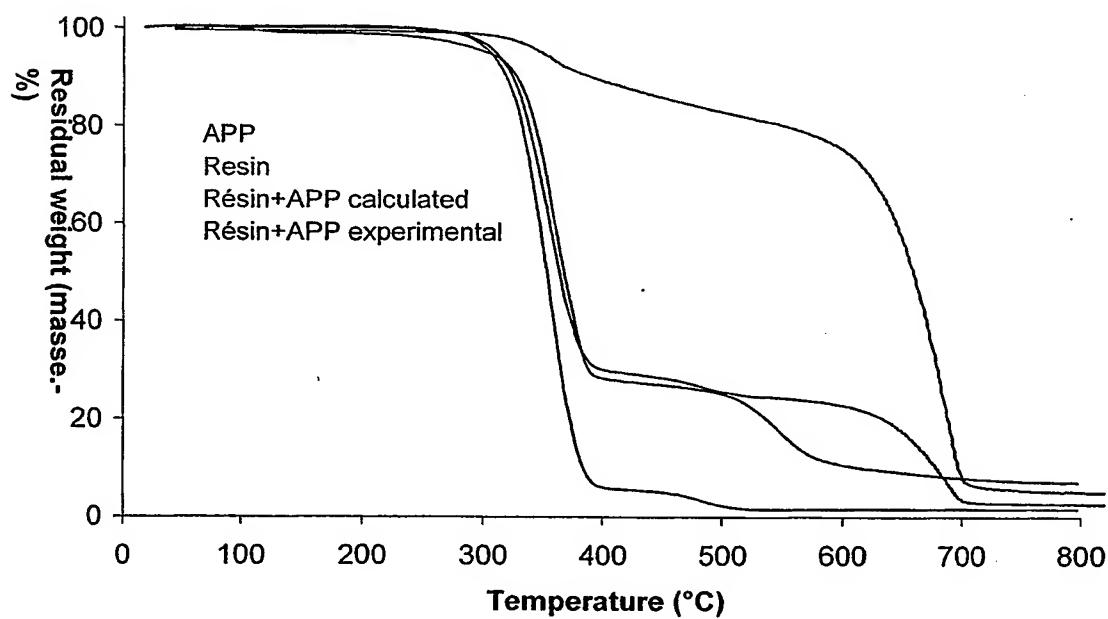


Figure 3

Thermal degradation curve of cross-linked PMS/2EHA resin, APP and of the 60/40 w mixtures of the two.

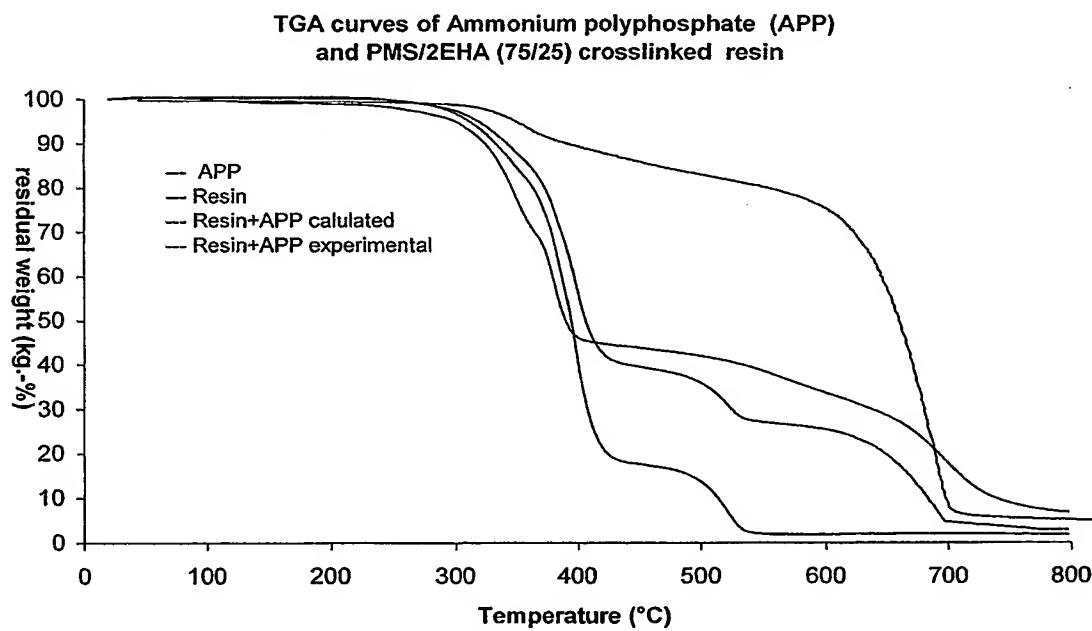


Figure 4

Thermal degradation curve of cross-linked styrene/acrylic resin, APP and of the 60/40 w mixtures of the two.

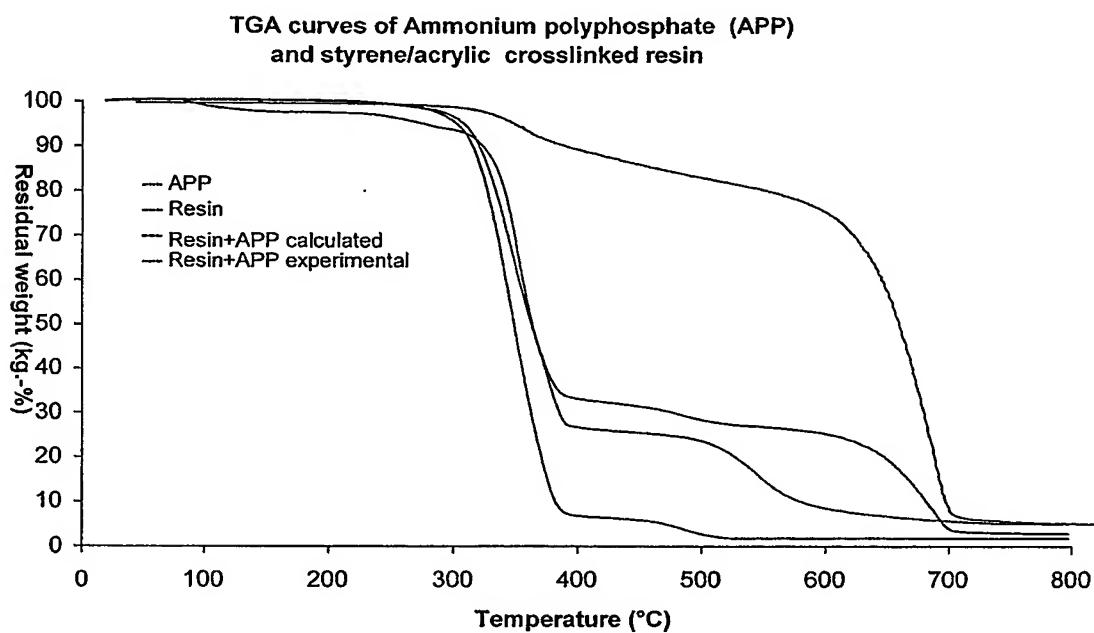
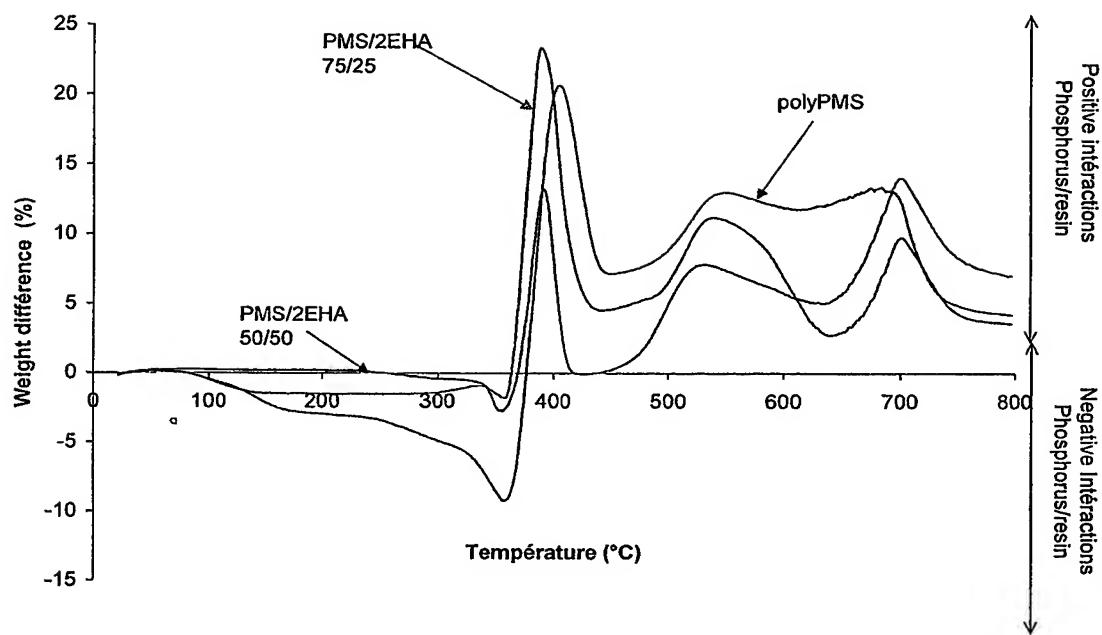
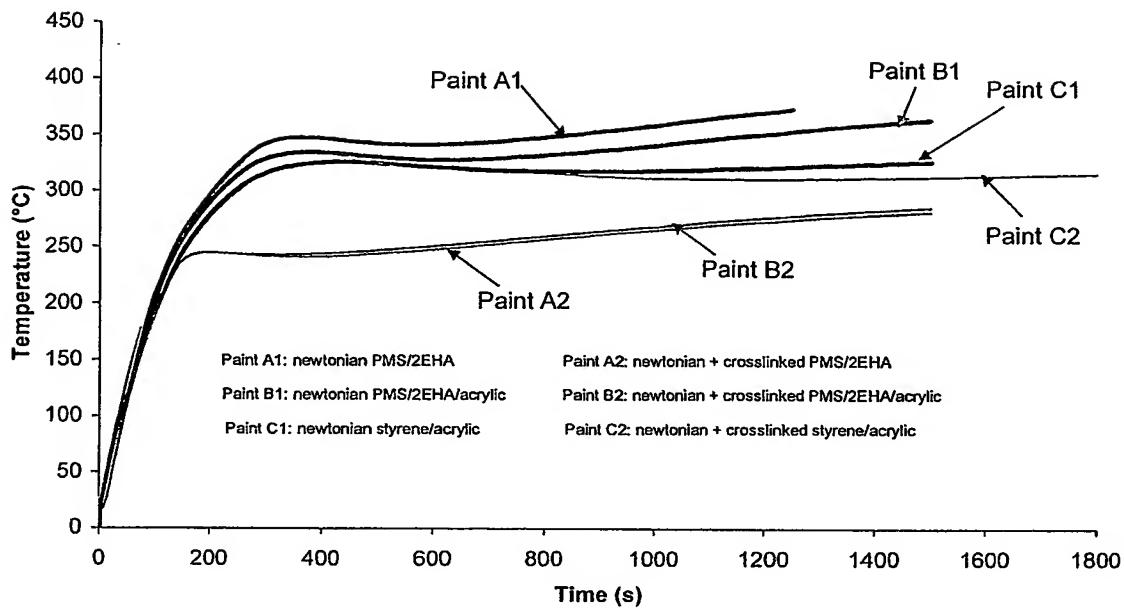


Figure 5



$\Delta(T)$ curves: difference between theoretical and experimental weight loss in TGA for 60/40 blends of various PMS/2EHA resins and APP

Figure 6



Thermal insulation on aluminium plates with intumescent coatings prepared with PMS/2EHA and with styrene/acrylic resins

Figure 7

Thermal insulation on aluminium plates obtained with intumescent coatings prepared with various types of resins

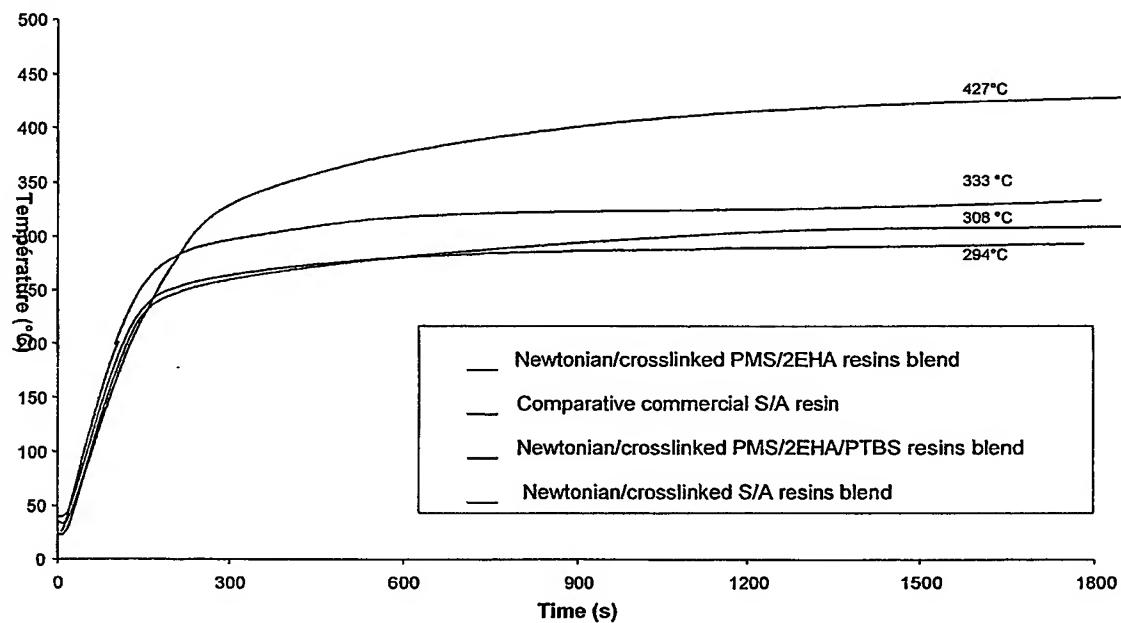


Figure 8

RHR measured with intumescent coatings prepared with various types of resins and exposed at 35 kW/m^2

